

all this knowledge with regard to this particular specimen, but in doing so he has exercised, consciously or unconsciously, his powers of observation, comparison and discrimination with regard to scores of other birds, so that his experience has been broadened and his power and judgment very materially strengthened."

The main text of Prof. Barrows work follows the nomenclature of the new A. O. U. Check-List. After the name comes a paragraph of popular synonyms and such technical synonyms as are used in the standard works; then follows a brief summary of the more striking characters by which the species may be recognized; an outline of its general distribution; a discussion of its occurrence in Michigan, its habits, nesting, etc., often at considerable length; and finally, a technical description. Much valuable economic and historic matter is incorporated in the articles the object being to select 'such information as would be useful and interesting.' Of Cook's 336 species 30 have been relegated to the hypothetical list while 20 others have been added making a total of 326 positively identified within the limits of the state.

Each family is preceded by a key for use with the specimen in hand, while six appendices treat respectively of, Additions and Corrections, Hypothetical List, Bibliography, Glossary, Outline of Classification of North American Birds (families and orders), and List of Contributors.

The value of the bibliography is materially lessened by the fact that the titles of each author are printed continuously, in one paragraph with title, reference date, etc., all in the same style of type which makes it exceedingly difficult to consult. The general typography and appearance of the work are excellent and the half tones and line cuts which are drawn from various sources, some of them original, are usually well printed.

Prof. Barrows has evidently had the cordial support of all Michigan ornithologists and bird lovers in his task and the result is one of which the state and the author may well be proud.—W. S.

Willett's Birds of the Pacific Slope of Southern California.¹—In this recent publication of the Cooper Ornithological Club forming number 7 of the Pacific Coast Avifauna series, Mr. Willett presents a carefully prepared annotated list of the birds of 'the Pacific slope of southern California from, and including Santa Barbara County, to the Mexican line and from the summit of the mountains to the ocean, also including all the islands of the Santa Barbara group.' The work was originally intended as a revision of Grinnell's 'Birds of the Pacific Slope of Los Angeles County' published in 1898, but it was later thought better to extend its scope to the above limits.

The style and typography of the work are excellent and conform to other numbers of the same series. In nomenclature the author follows the

¹ Pacific Coast Avifauna, Number 7. Birds of the Pacific Slope of Southern California. By George Willett, Cooper Ornithological Club. Hollywood, California. Published by the Club. July 25, 1912 — 8vo., pp. 1-122.

latest edition of the A. O. U. Check-List discussing in detail his reasons for differing from the A. O. U. Committee in the distribution of several species. We note the following cases where Mr. Willett's evidence leads him to differ with the statements of the Check-List.

Brachyramphus marmoratus is stated in the Check-List to range south to San Diego in winter but Mr. Willett can find no record south of Santa Barbara.

Branta canadensis occidentalis is credited with ranging to southern California in winter but there seems to be no record for the region covered by the present paper.

Oreortyx picta plumifera is considered by Mr. Willett, to include all southern California birds. Those from the San Gabriel and San Bernardino Mountains are referred to *O. p. confinis* in the Check-List but Messrs. Grinnell and Swarth after careful study of the matter would refer all to *plumifera*.

Following the opinion of Messrs. Ridgway and Oberholser he excludes *Empidonax griseus* from California referring the birds so called to *E. wrighti*.

Aphelocoma californica obscura is also excluded from California, the birds breeding from Los Angeles to San Bernardino which are referred to this form in the Check-List, proving to be, in the opinion of Messrs. Grinnell and Swarth, referable to *A. c. californica*.

Careful local studies of this kind are just what are needed to straighten out the details in the distribution of our birds, and Mr. Willett's contribution is most welcome.

We note but few typographical or other errors, but since the author invites corrections we may mention that the Avocets noted by Dr. Newberry (p. 35) were in the winter of 1855 not 1885 and the Audubon reference on p. 71 should be to the Ornithological Biography not the Elephant Folio. We might also call attention to an earlier publication of Evermann's 'Birds observed in Ventura County, Cal.' which appeared in Vol. 1, No. 8 (Jan. 1886), pp. 77-89, of the *Pacific Science Monthly*, a small journal edited by Stephen Bowers, Ph.D., and published at San Buenaventura, Cal., apparently as the organ of the Ventura Society of Natural History.

This title does not appear in Grinnell's Bibliography of California Ornithology. Except as to nomenclature the paper is essentially the same as that in 'The Auk' for 1886. *Polioptila melanura* however, is included (erroneously) as a rare resident.—W. S.

Mathews' Birds of Australia.¹— Three parts of this monumental work have been received since the last notice in 'The Auk.' Part 6 of Volume I, bearing date, January 31, 1912, consists of title page, contents, preface and index of the first volume, while Part 1 of Volume II, May 30, 1912, and Part 2 of Volume II, July 31, 1912, comprising 236 pages and 27 plates are devoted to the Petrels.

¹The Birds of Australia. By Gregory M. Mathews. With hand-coloured Plates. Roy. 4to. Witherby and Co., London.